

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: ANDY KASHIMIRO Examiner #: 60484 Date: 1/28/02
Art Unit: 3700 Phone Number 308-113-7 Serial Number: 09/458,233
Mail Box and Bldg/Room Location: 412-2401 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

LIT SEARCH 5,694,937

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: Seiders.com

NA Sequence (#) _____

STN _____

To: **Andres Kashnikow, SPRE TC3700, CP2,**

Case Number: # 09/458,235

Searched by: **Terry Solomon, Technical Information Specialist, EIC 3700**

Litigation search on: **US 5694937**

Databases searched: **Lexis (lexis.com); PlusPat and Inpadoc (Questel/Orbit)**

Results:

Lexis- Patent Litigation- Reissue
Patent Cases- None
Patent Journals- None

PlusPat and Inpadoc- see attached

If you have any questions regarding these results, contact **John Sims (308-4836).**

1/28/02 3:22 PM

1 of 1 DOCUMENT

5,694,937

GET 1st DRAWING SHEET OF 10

Dec. 9, 1997

Ultrasound diagnostic apparatus and method

REISSUE: Reissue Application filed Dec. 9, 1999 (O.G. Feb. 15, 2000) Ex. Gp.:
3737; Re. S.N. 09/458,235

1 / 1 PLUSPAT - ©QUESTEL-ORBIT - image

- PN** - US5694937 A 19971209 [US5694937]
- TI** - (A) Ultrasound diagnostic apparatus and method
- PA** - (A) TOKYO SHIBAURA ELECTRIC CO (JP)
- IN** - (A) KAMIYAMA NAOHISA (JP)
- AP** - US59388696 19960130 [1996US-0593886]
- PR** - JP1387495 19950131 [1995JP-0013874]
JP8977395 19950414 [1995JP-0089773]
JP14352595 19950609 [1995JP-0143525]
- IC** - (A) A61B-008/00
- EC** - A61B-008/00D
A61B-008/06F
G01S-007/52S
G01S-007/52S4
G01S-015/89D
- PCL** - ORIGINAL (O) : 600443000; CROSS-REFERENCE (X) : 600446000
600453000 600458000
- DT** - Basic
- CT** - US5255683; US5410516
Christy K. Holland, et al., "In Vitro Detection of Cavitation Induced by a Diagnostic Ultrasound System" IEEE Transactions On Ultrasonics, Ferroelectrics, and Frequency Control, vol. 39, No. 1, Jan. 1992.
- STG** - (A) United States patent
- AB** - According to an ultrasound diagnostic apparatus of the present invention, a cross section of an examining human body having bubbles implanted as ultrasonic shadowing agent is scanned by an ultrasound so as to obtain an echo signal. Image data is repeatedly generated based on the echo signal. Then, image data is displayed as a motion image. Power of the ultrasound to be transmitted is changed from first power to second power, which is stronger than first power. The ultrasound of first power breaks a first amount of bubbles. The ultrasound of second power, which is stronger than first power, breaks a second amount of bubbles, which is larger than the first amount of bubbles. Though the image generated by use of first power is unclear, the amount of breakage of bubbles can be extremely retrained. Since the image is used to examine the state of the bubble flow to the region of interest, unclearness can be allowed. When the bubbles are fully introduced to the region of interest, first power is changed to second power. Second power is stronger than first power. Therefore, the image obtained by second power is clearer than image obtained by first power, and is fit for a high accurate diagnosis of the state of the blood stream.

1 / 1 LGST - ©LEGSTAT

PN - US 5694937 [US5694937]
AP - US 593886/96 19960130 [1996US-0593886]
DT - US-P
ACT - 19960130 US/AE-A
APPLICATION DATA (PATENT)
US 593886/96 19960130 [1996US-0593886]

19960130 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
KABUSHIKI KAISHA TOSHIBA 72 HORIKAWA-CHO, SAIWAI-KU
KAWASAKI-SHI, JAPAN * KAMIYAMA, NAOHISA : 19960118

19971209 US/A
PATENT

20000215 US/RF
REISSUE APPLICATION FILED
19991209

UP - 2000-07

1 / 1 CRXX - ©CLAIMS/RRX

PN - 5,694,937 A 19971209 [US5694937]
PA - Toshiba Corp JP
ACT - 19991209 REISSUE REQUESTED
Issue Date of O.G.: 20000215
Reissue Request Number: 09/458235
Examination Group responsible for Reissue process: 3737

1 / 1 PAST - ©PAST

AN - 200007-001075
PN - 5694937 A [US5694937]
OG - 2000-02-15
ACT - REISSUE APPLICATION FILED

1 / 5 INPADOC - ©INPADOC

PN - JP 3023290 B2 20000321 [JP3023290]
IN - KAMYAMA NAOHISA
PA - TOKYO SHIBAURA ELECTRIC CO
AP - JP 89773/95-A 19950414 [1995JP-0089773]
PR - JP 89773/95-A 19950414 [1995JP-0089773]
IC - A61B-008/00

2 / 5 INPADOC - ©INPADOC

PN - JP 8196537 A2 19960806 [JP08196537]
TI - ULTRASONIC DIAGNOSTIC SYSTEM
IN - KAMIYAMA NAOHISA
PA - TOKYO SHIBAURA ELECTRIC CO
AP - JP 13874/95-A 19950131 [1995JP-0013874]
PR - JP 13874/95-A 19950131 [1995JP-0013874]
IC - A61B-008/06; G01S-015/50

3 / 5 INPADOC - ©INPADOC

PN - JP 8280674 A2 19961029 [JP08280674]
TI - ULTRASONIC DIAGNOSTIC APPARATUS
IN - KAMIYAMA NAOHISA
PA - TOKYO SHIBAURA ELECTRIC CO
AP - JP 89773/95-A 19950414 [1995JP-0089773]
PR - JP 89773/95-A 19950414 [1995JP-0089773]
IC - A61B-008/00

4 / 5 INPADOC - ©INPADOC

PN - JP 8336527 A2 19961224 [JP08336527]
TI - ULTRASONIC DIAGNOSTIC SYSTEM
IN - KAMIYAMA NAOHISA
PA - TOKYO SHIBAURA ELECTRIC CO
AP - JP 143525/95-A 19950609 [1995JP-0143525]
PR - JP 143525/95-A 19950609 [1995JP-0143525]
IC - A61B-008/00

5 / 5 INPADOC - ©INPADOC

PN - US 5694937 A 19971209 [US5694937]
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JP 143525/95-A 19950609 [1995JP-0143525]
IC - A61B-008/00

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DT - US-P
ACTE - 19960130 US/AE-A
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KAWASAKI-SHI, JAPAN * KAMIYAMA, NAOHISA : 19960118

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UP - 2000-07